## Amendments to the Specification

Please amend paragraph [0025] as follows:

[0025] The ring oscillator 302 then produces a square wave signal, thereby internally

supplying pumping signals for the rest of the generator. The swing of the square wave

signal is within the allowable operating voltage range. The initial control module 304

initializes D/A converter 306 and <u>combines the parallel data inputs 316 with the output</u>

<u>clock signal of the ring oscillator 302 to produce clocked parallel data inputs to the D/A</u>

<u>convertor 306. D/A convertor 306 can be initialized by a signal from the initial control</u>

<u>module 304 forcing the weighted charge redistribution capacitors e.g. C, 2C .. $2^{n-1}$C to</u>

<u>ground while the reset signal in Figure 4A is also activated, thus discharging these</u>

<u>capacitors</u> ~~also serves to improve precision~~. <u>If the charge redistribution capacitors are</u>

<u>binary weighted (as shown in Fig. 4A) code conversion module 308 is not needed and</u>

<u>signal 316 is a binary weighted parallel digital input. If, however, the charge</u>

<u>redistribution capacitors all have the same value, then</u> ~~The~~ code converter 308

transforms a set of binary inputs to a set of thermometer signals <u>input at</u> 316, ~~a set of~~

~~finely-divided signals~~ which <u>are</u> ~~is~~ then received by the initial control module 304. In

response to the code converter 308 and the initial control module 304, the D/A

converter 306 generates a pumping, analog equivalent of the square wave. It is

understood that the initial control module 304 and the code converter 308 may be

deemed as a part of the D/A converter 306 and they may be optional for the design too.

This pumping signal may be reset by applying a reset signal to the D/A converter 306.

The charge pump 310 then converts the pumping signal to a direct-current (DC)

voltage. This DC voltage level is smoothed into a signal Vout by a load capacitor 312.

Therefore, Vout is essentially a finely-divided range of reverse bias voltage applicable to

the substrate of the transistor. The more finely-divided this reverse bias voltage is, the

more voltage option there is available that is optimally close to the specific voltage

necessary to produce the minimum leakage current Ioff.